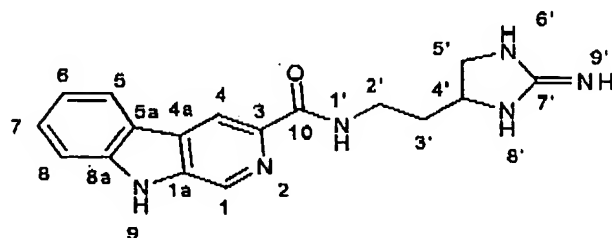


Claims:

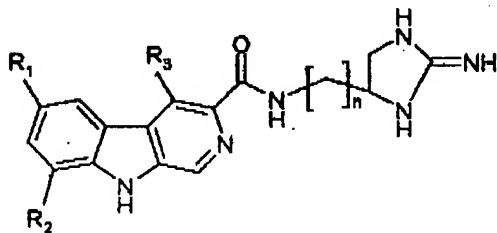
1. β -carboline derived guanidine alkaloid, tiruchenduramine of the Formula 1



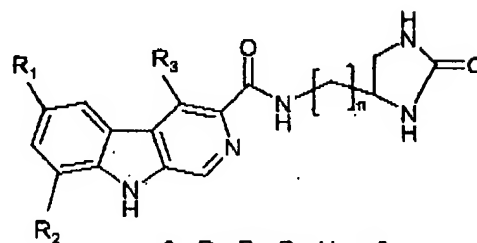
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isolated from an ascidian *Synpicum macroglossum* and its derivatives thereof.

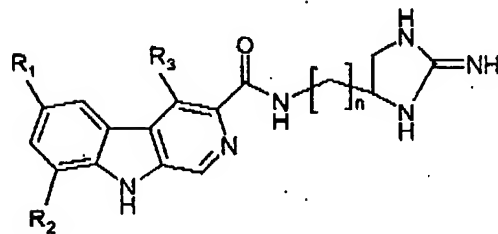
- 2 A compound as claimed in claim 1 selected from the following:



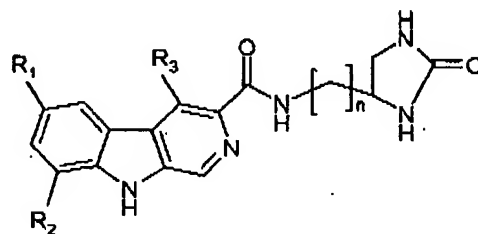
1. $R_1=R_2=R_3=H$, $n=2$
2. $R_1=R_2=R_3=H$, $n=3$
3. $R_1=R_2=R_3=H$, $n=4$
4. $R_1=R_2=R_3=H$, $n=5$
5. $R_1=R_2=R_3=H$, $n=6$



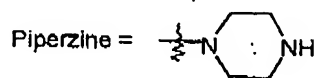
6. $R_1=R_2=R_3=H$, $n=2$
7. $R_1=R_2=R_3=H$, $n=3$
8. $R_1=R_2=R_3=H$, $n=4$
9. $R_1=R_2=R_3=H$, $n=5$
10. $R_1=R_2=R_3=H$, $n=6$



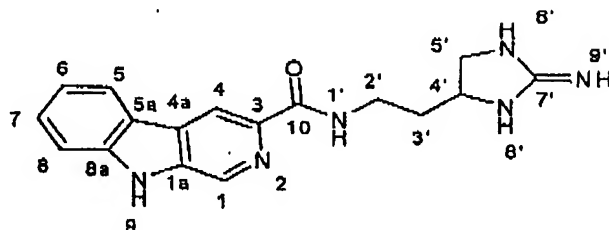
11. $R_1 = \text{Piperazine}$, $R_2=R_3=H$, $n=2$
12. $R_1 = \text{Piperazine}$, $R_2=R_3=H$, $n=3$
13. $R_1 = \text{Piperazine}$, $R_2=R_3=H$, $n=4$
14. $R_1 = \text{Piperazine}$, $R_2=R_3=H$, $n=5$
15. $R_1 = \text{Piperazine}$, $R_2=R_3=H$, $n=6$



16. $R_1 = \text{Piperazine}$, $R_2=R_3=H$, $n=2$
17. $R_1 = \text{Piperazine}$, $R_2=R_3=H$, $n=3$
18. $R_1 = \text{Piperazine}$, $R_2=R_3=H$, $n=4$
19. $R_1 = \text{Piperazine}$, $R_2=R_3=H$, $n=5$
20. $R_1 = \text{Piperazine}$, $R_2=R_3=H$, $n=6$



3. A process for the preparation of β -carboline derived guanidine alkaloid, tiruchenduramine of the Formula 1

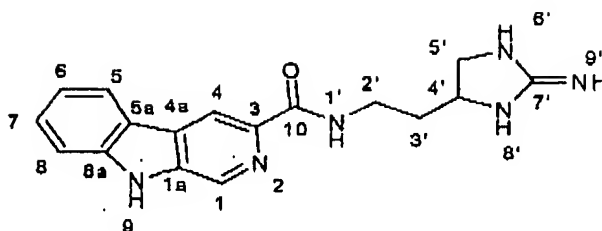


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which comprises subjecting an ascidian to solvent extraction.

4. A process as claimed in claim 3 wherein said ascidian is *Synoicum macroglossum*.
5. A process as claimed in claim 3 or 4 wherein said extraction comprises
10 extraction in the presence of methanol by followed by a dichloromethane :
methanol extraction and the extract so obtained is subjected to purification.
6. A process as claimed in claim 5 wherein said ascidian comprises freeze dried
Synoicum macroglossum.
7. A process as claimed in claim 6 wherein said dichloromethane and methanol are
15 used in a ratio of 1:1.
8. A process as claimed in claim 7 wherein after extraction with dichloromethane
and methanol, the extract so obtained is partitioned between water and EtOAc.
9. A process as claimed in claim 8 wherein said water extract is lyophilized and
and the residue is triturated with MeOH.
- 20 10. A process as claimed in any one of claims 5 to 9 wherein said purification
comprises a Sephadex LH-20 column chromatography.
11. A pharmaceutical composition comprising as an active ingredient a compound
of Formula 1



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alongwith a pharmaceutically acceptable carrier, vehicle or excipient.

12. A pharmaceutical composition comprising as an active ingredient a compound as claimed in claim 2 and alongwith a pharmaceutically acceptable carrier, vehicle or excipient.
13. A composition as claimed in claim 11 or 12 wherein said composition is used for the treatment of diabetic disorders and wherein said active ingredient is present in an amount of about 78.8 μ g.
14. A composition as claimed in claim 13 wherein the unit dosage of said composition is from about 15 mg to about 480 mg, preferably, from about 24 mg to about 280 mg.
15. A pharmaceutical composition comprising a first therapeutic agent consisting of a β -carboline derived guanidine alkaloid, tiruchenduramine selected from the compounds shown in formulae 1 to 20 and a second therapeutic agent different from said first therapeutic agent.
16. A composition as claimed in claim 15 wherein said second therapeutic agent is selected from alkylating agents, antimetabolites, vinca alkaloids, antibiotics, cytokines, growth factors and non-steroidal anti-inflammatory drugs, such as aspirin.
17. Use of β -carboline derived guanidine alkaloid, tiruchenduramine having the structure shown in formula 1 to 20 in the treatment of diabetic disorders.
18. A method for treating a mammal which comprises administering to a mammal in need thereof an effective amount of β -carboline derived guanidine alkaloid, tiruchenduramine having the structure shown in formula 1 to 20.
19. A method for treating a mammal which comprises administering to a mammal in need thereof an effective amount of a pharmaceutical composition as claimed in any one of claims 11 to 16.